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PRBO Conservation Science

Climate Smart Conservation: Securing our future in a changing world

Forest and Range Assessment Steering Committee
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To Prevent Total Climate Chaos-

Must engage in mitigation *and* adaptation simultaneously

- **Mitigation**: reduce greenhouse gas emissions (GHG) and enhance carbon sinks

- **Adaptation**: actions to reduce the risks of, and adapt to, climate change impacts on the human and **natural environment**

‘Mitadaption’

*Or….***Climate Smart**

Climate Smart Conservation

http://www.seedsofdream.org/Volunteering.html

Definition:

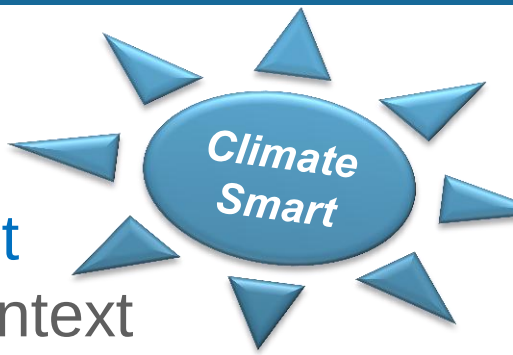
Conservation strategies and actions that specifically address impacts of climate change in concert with other threats.

Climate smart conservation promotes nature-based solutions for wildlife and people that:

- Reduce GHG emissions and enhance carbon sinks;
- Reduce climate change impacts and enhance ability to adapt; and,
- Sustain vibrant, diverse ecosystems.

Adapted from National Wildlife Federation's Climate Smart Conservation Adaptation Principles 2011

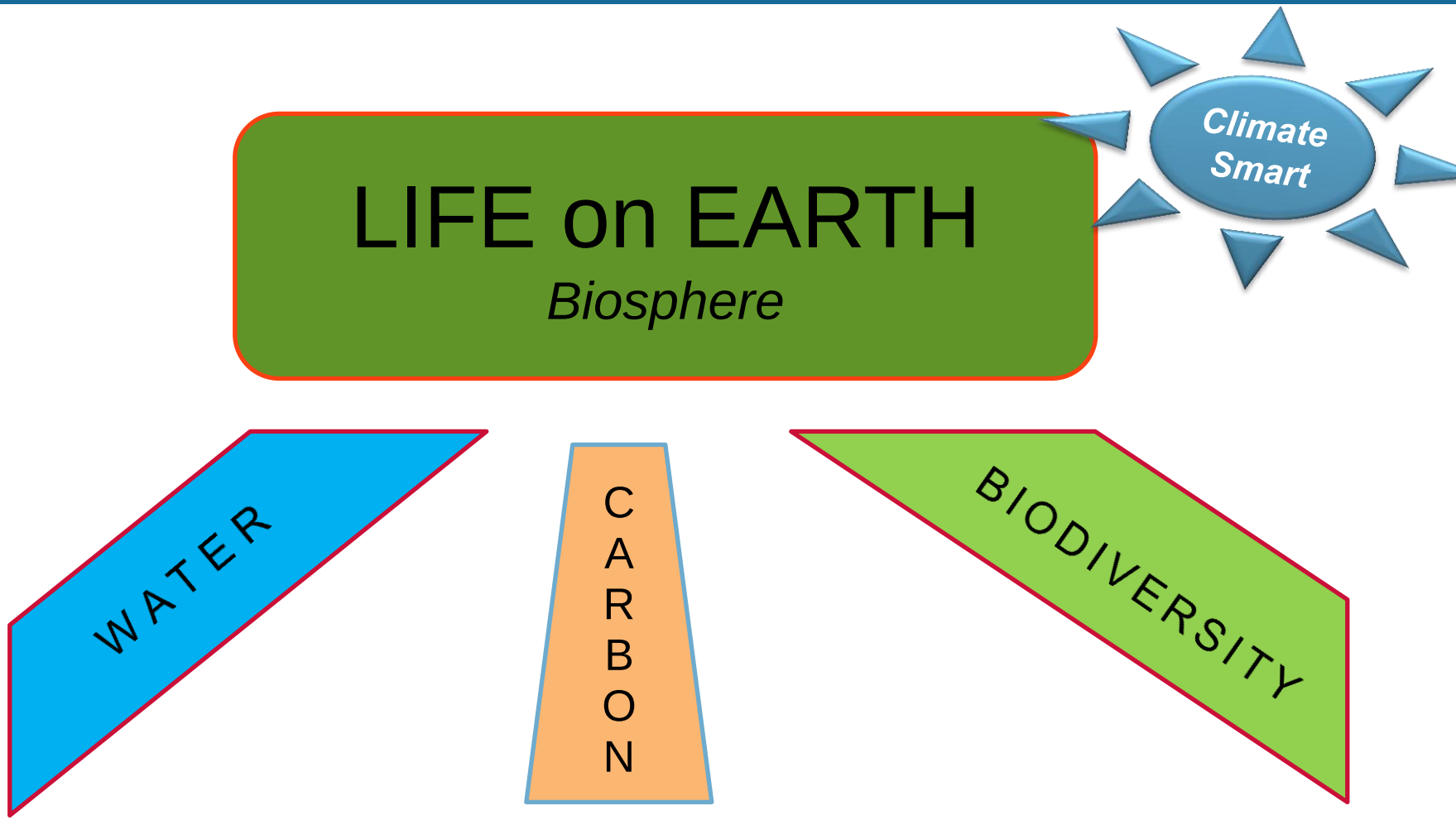
Climate Smart Conservation
Key Principles- Decision Making Lens



1. Focus actions on future conditions, not past
2. Design actions in ecosystem/watershed context
3. Employ flexible, adaptive approaches for timely response to continual change
4. Prioritize actions across multiple scenarios for greatest benefits to wildlife and people
5. Collaborate & communicate across sectors for timely, long term solutions

Adapted from: Draft Principles for CA Resources Agency Adaptation Update 2012; NWF Climate Smart Conservation Adaptation Principles 2011; CSIRO's Climate change impacts on Australia's biodiversity conservation & protected areas, Sept 2012 Update

Prioritize ecosystem function & ecological diversity over single species/goals for multiple benefits



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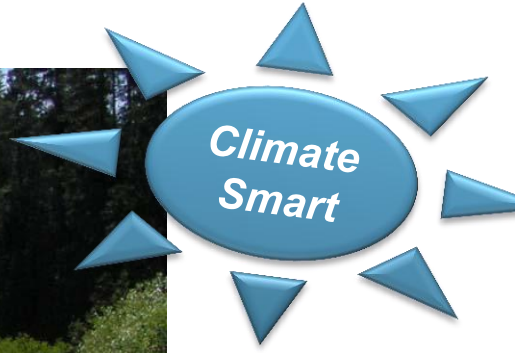
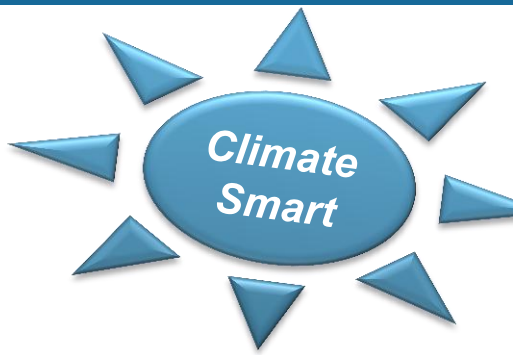
Climate Smart: restore meadows to store, purify, cool and slowly release water



Climate Smart: Fuel reduction + some high severity fires= habitat mosaic, fire resilience, ecological health



Climate Smart: Prescriptive grazing + other eco-friendly practices = re-watered rangelands

Water, carbon, biodiversity – and bottom lines- enhanced

IN SUMMARY: Climate Smart = Ecologically Sound

Climate change is happening now and accelerating

We must practice Climate Smart Conservation daily:

to reduce/reverse GHG emissions, promote adaptation, and sustain ecosystem benefits for wildlife and people

Key Principles:

1. Focus actions on future conditions, not past
2. Design actions in ecosystem/watershed context
3. Employ flexible, adaptive approaches for timely response to continual change
4. Prioritize actions across multiple scenarios for greatest benefits to wildlife and people
5. Collaborate & communicate across sectors for timely, long term solutions; convey science *and* hope!
6. **Follow the TEN% Rule: Test and Experiment Now!**


Because of our climate smart actions today, healthy ecosystems will sustain thriving wildlife & human communities for decades to come, on land and at sea, ….

Thank you!

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Marin Community Foundation
Giles Mead Foundation
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NOAA National Marine Sanctuaries
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